

REMARKS

Claims 32-62 are pending in the present application. The specification has been amended. Applicant has submitted proposed changes to FIGS. 3-5. Applicant respectfully requests reconsideration of the application in view of the foregoing amendments and the remarks appearing below.

Lack of Responsiveness to Prior Office Action

The Examiner has asserted that the Amendment Applicant submitted on July 28, 2003 is not fully responsive to the prior Office Action because the Applicant has failed to point out where and how the originally-filed disclosure provides support for the newly added claims 41-62. In particular, the Examiner states that it is not clear where, or even whether, support for certain language appearing in these claims, e.g., "impervious heat transfer layer" and "permeable heat transfer matrix," exists in the originally-filed disclosure.

Applicant respectfully asserts that the disclosure, as filed, does indeed support the terminology used in new claims 41-62 that merely describes features of a heat exchanger of the present invention. Applicant uses such terminology in the new claims, among other things, in response to the prior rejections issued by the Examiner for the purpose of clarifying the invention. Primary support for this terminology is found throughout the drawings of the present application. For example, FIG. 6 shows a cross-sectional view of a heat exchanger of the present invention. A copy of FIG. 6 is attached hereto for the Examiner's convenience and is labeled with the terms for which the Examiner is requesting support. As seen in the attached FIG. 6, the heat exchanger clearly includes: 1) a manifold region; 2) an impervious heat transfer layer and 3) a permeable heat transfer matrix. In this connection, Applicant has amended the written description of the drawings in the manner appearing above to include the alternative, clarifying terminology.

Applicant asserts that the terminology of new claims 41-62 that the Examiner has questioned is merely alternative terminology that describes features inherent in a heat exchanger of the present invention. The meanings of these terms are self-evident, since Applicant uses the terms in accordance with their ordinary meanings. That is, a "manifold region" is a region containing manifolds, an "impervious heat transfer layer" is a layer wherein heat transfer occurs and that is impervious to a working fluid contained within the heat exchanger and a "permeable heat-transfer matrix" is a matrix wherein heat transfer occurs and that is permeable to the

working fluid. Regarding the word "matrix," Applicant uses this word consistently with its ordinary meaning, i.e., a "surrounding substance within which something . . . is contained." Webster's II, New College Dictionary (2001). In this case, the "substance" is the material of the heat exchanger that defines the interconnecting passageways between the inlet and outlet manifolds that contains the working fluid, i.e., the "something" of the dictionary definition. Since Applicant uses these terms in a manner consistent with their ordinary meanings to describe inherent features of a heat exchanger of the present invention, they are clearly supported by the disclosure as originally filed. In addition, Applicant notes that case law and other authorities indicate that the mere addition of alternative terminology presented to clarify an invention is not contrary to any Patent Law or Rule. See, e.g., *Chisum on Patents*, § 11.04[2][a] and *O'Hara Manufacturing Ltd. V. Eli Lilly & Co.*, 231 USPQ 753, 761 (N.D. Ill. 1986).

Moreover, Applicant points out that the terminology the Examiner has drawn into question is terminology that has been used in the prior art to identify various features of heat exchangers similar to the heat exchanger of the present invention. Therefore, those skilled in the art know and understand these terms. For example, U.S. Patent Nos. 5,029,638 and 5,145,001 discussed in the background section of the present application utilize the terms "permeable" and "impermeable" in the same context as Applicant uses these terms in new claims 41-62. Although these patents do not explicitly use the term "matrix," but rather refer to the permeable matrices of the heat exchangers disclosed therein as "porous elements," those skilled in the art would readily recognize that the structures identified by these terms are analogous to one another. "Matrix" is certainly a term used in the field of the present invention and related technical fields. In addition, Applicant has used the terms "permeable" and "impermeable" in the same context as the context of new claims 41-62 in U.S. Provisional Patent Application Serial No. 60/210,213, filed June 8, 2000, entitled "Laminate Normal Flow Heat Exchanger for Improved Inlet/Outlet Headering" on which the present application claims priority.

In view of the foregoing, Applicant asserts that the terms the Examiner has drawn into question are: 1) supported by the specification as originally filed; 2) not new matter and 3) readily understood by those skilled in the art as alternative terminology for describing features inherent in a heat exchanger of the present invention.

CONCLUSION

In view of the foregoing, Applicant submits that claims 32-62 are in condition for allowance. Therefore, prompt issuance of a Notice of Allowance is respectfully solicited. If any issues remain, the Examiner is encouraged to call the undersigned attorney at the number listed below.

Respectfully submitted,

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Attachments:

Copy of FIG. 6 of drawings

Proposed amended FIGS. 3-5

BTv.253193.1